

Patent Abstracts of Japan

PUBLICATION NUMBER : 04161775  
PUBLICATION DATE : 05-06-92

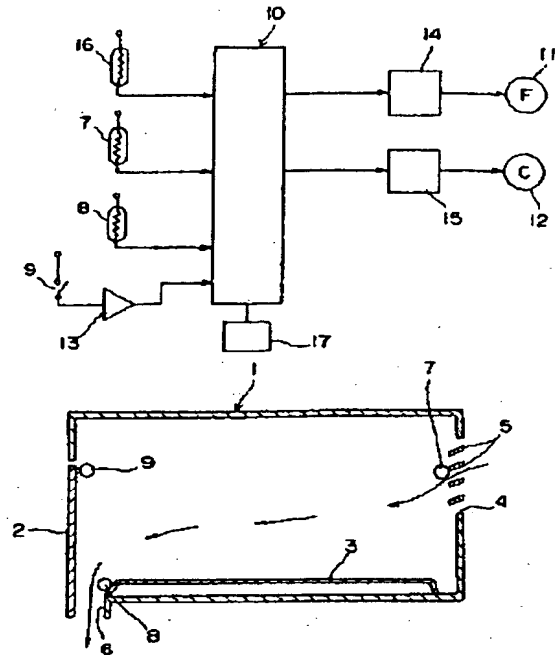
APPLICATION DATE : 26-10-90  
APPLICATION NUMBER : 02289438

APPLICANT : SHARP CORP;

INVENTOR : MIYAGAMI JUNJI;

INT.CL. : F25D 17/08

TITLE : FREEZER AND REFRIGERATOR



**ABSTRACT :** **PURPOSE:** To provide a freezer and refrigerator having a superior freezing efficiency capable of starting a rapid freezing just after inserting a food by a method wherein the freezer refrigerator is provided with a compressor control means for operating the compressor cooperating with an evaporator for a specified period of time when a judgment means judges it as YES.

**CONSTITUTION:** A door 2 of a rapid freezing chamber 1 is opened or closed and a food not yet freezed is placed on a metallic plate 3. An opening or closing sensor 9 outputs a sensing signal. A micro-computer 10 outputs a control signal to a fan 11 and operates it for a specified period of time ( $t_a$ ). Then, cold air sucked into the freezing chamber is made to flow from a cold air inlet port 4 into the rapid freezing chamber 1, resulting in that the food is cooled and warmed then the air is flow out of the cold air discharging outlet port 6. Due to this operation, a temperature difference ( $\theta_2 - \theta_1$ ) at the cold air inlet or outlet port inputted to the microcomputer 10 detected by temperature sensors 7 and 8 is rapidly increased and when a specified time ( $t_a$ ) elapses, it becomes more than a specified value  $\Delta T_0$ . At this time, the micro-computer 10 judges it as a relation of  $(\theta_2 - \theta_1) > \Delta T_0$ , and then a control signal is outputted to each of a fan 11 and a compressor 12 and they are operated for a specified period of time ( $t_b$ ). Accordingly, the evaporator 26 is operated only for a specified of time ( $t_b$ ) substantially just after insertion of the food into the rapid freezing chamber 1 and then the food is rapidly frozen.

COPYRIGHT: (C)1992,JPO&Japio

FD